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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/019,140	05/06/2002	Adrian N. Farr	P/61715-PCT	6238

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EXAMINER	
JACKSON, BLANE J	

ART UNIT	PAPER NUMBER
2685	

DATE MAILED: 08/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/019,140	FORESTER ET AL	
	Examiner	Art Unit	
	Blane J Jackson	2685	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 May 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *11-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *11-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _____ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 7.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 11-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Camiade et al. (U.S. Patent 5,305,469).

As to claims 11, 14, 19 and 20, Camiade teaches a transponder tag or modulator circuit comprising:

A negative impedance amplifier operable for *reflecting and amplifying* a signal applied to the amplifier and switching means for switching the impedance amplifier between two reflecting states having impedances in the two reflecting states selected such that a phase of a reflected and amplified signal switches by *substantially* 180 degrees (figure 4, a modulated transponder comprising a reflection amplifier based on a FET that is biased for amplitude or phase modulation, column 4, lines 3-41 and bias background: column 3, lines 48-64, negative impedance amplifier: column 5, lines 1-18).

As to claim 12, Camiade teaches the impedances in the two reflecting states are selected such that a reflection gain of the amplifier in the two reflecting states is

substantially the same and such that the reflected and amplified signal is a binary phase shift keyed signal (phase modulation: column 4, lines 30-41).

As to claim 13, Camiade teaches a modulator circuit according to claim 1 that can be amplitude modulation, phase modulation or frequency modulation (FM), (column 2, lines 45-57), where the impedances in the two reflecting states are selected such that a reflection gain of the amplifier in the two reflecting states is different and wherein the impedances are selected such the reflected and amplified signal is substantially single sideband signal which is a tuned and filtered portion of amplitude modulation.

As to claim 15, Camiade teaches the switching means switches the biasing of the transistor to switch the transistor between the two reflecting states (figure 4, modulator circuits, column 4, lines 3-10).

As to claim 16, Camiade teaches an antenna for receiving and converting radiation to the signal applied to the amplifier and for radiating the reflected and amplified signal (figure 4, antenna (9), column 5, lines 1-22).

As to claims 17 and 18, Camiade teaches an active circuit, specifically an FET, comprise the feature of giving power to the carrier, semi active circuits give no gain to the carrier but gain at the demodulation frequencies as well as passive circuits using diodes with no gain (column 2, lines 4-29). Consequently, Camiade inherently teaches a

bipolar transistor based circuit given an FET transistor is used in the discussion, both active components.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Baldwin (U.S. Patent 4,075,632) discloses the transponder with modulation by loading rectifier and pin diode. Utsu et al. (U.S. Patent 5,311,186) discloses a transponder with modulated reflection wave of the query radio wave utilizing a biased diode. Forster (U.S. Patent 6,046,668) discloses an interrogator circuit utilizing a semi passive transponder which reflectively modulates an incoming signal where the transistor self oscillates and radiates a signal. Shober et al. (U.S. Patent 5,649,295) discloses a method for a transponder or tag that modulates the reflection of the first modulated signal using a second information signal.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blane J Jackson whose telephone number is (703) 305-5291. The examiner can normally be reached on Monday through Friday, 8:00 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on (703) 305-4385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BJJ

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